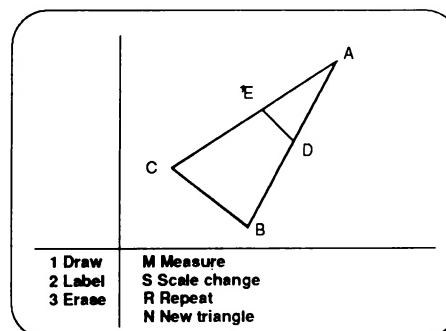# THE GEOMETRIC SUPPOSER QUICK REFERENCE CARD
## *Triangles*

## Menus—Apple

| 1 DRAW | 2 LABEL | 3 ERASE | M MEASURE | S SCALE CHANGE | R REPEAT | N NEW TRIANGLE |
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| 4 Altitude | 4 Random point | | 4 Angle | | | 4 Isosceles |
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☐ Main Menu

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1 Draw  M Measure
2 Label  S Scale change
3 Erase  R Repeat
        N New triangle

## About Certain Keys

**ESC:** At any time, ESC returns you to the previous menu. The number of times you must press ESC depends on where you are in the construction sequence.

**RETURN:** Press RETURN when making numerical entries or when you have the option of making more than one entry. In all other cases, the program carries out the operation automatically once you make your entry.

**CTRL-D:** To clear the Data Column, press CTRL-D(elete).

**u:** This is the symbol for the standard unit of length or area which appears in the upper right hand corner of the screen. Use this unit in multiples when specifying the length of any segment to be drawn, or in measuring any segment, area, or distance by simply entering the letter *u*.

## About Some Limits

**Specifying length:** Because of the size of the screen, we recommend that you use segments or sides with lengths less than 8 units long so that your triangle or construction will fit on the screen.

When the program calls for you to enter a length, you may enter a number with up to two decimal places.

**"Beeps":** If your triangle or construction will not fit on the screen, the program will "beep" and automatically adjust the size of the construction so that it fits. When this happens, you can also try using the **Scale change** option. In addition to changing the scale of the construction, the program will attempt to locate the construction on the screen so that it can be seen in its entirety.

**Labels:** Because of memory limitations, you may not make constructions that require more than 20 labels. The available labels are A through T. When you try to go past T, the screen displays the following message: "Limit on the number of constructions or labels has been reached! Press the space bar to continue." When this message appears, you can no longer use the **Draw, Label,** or **Erase** options, but you can use **Measure, Scale change,** or **New triangle** after pressing the space bar.

**Constructions:** Because of memory limitations, you may not make more than 15 constructions on a triangle. When you reach the limit on possible constructions the screen displays the following message: "Limit on the number of constructions or letters has been reached! Press the space bar to continue." When this message appears, you can no longer use the **Draw, Label,** or **Erase** options, but you can use **Measure, Scale change, Repeat,** or **New triangle** after pressing the space bar.

**Inverse letters:** Points created in the **Adjustable Elements** option are labeled with inverse letters, and all subsequent labels are inverse letters. Constructions with inverse letters cannot be repeated or rescaled. If you try to use one of the options, the screen displays the following message: "No constructions with inverse letters can be repeated or scaled." When this message appears, you have two options. You can press ESC, which cancels only your command to **Repeat** or to carry out a **Scale change,** or you can press the space bar, which allows you to repeat or scale any construction that does not have an inverse label.

**Measuring:** Due to the graphic limitations of your computer, measurements will not always be precise.

## About Some Miscellaneous Items

**Entry errors:** If in the course of making an entry you make a mistake (e.g., entering ABD when you mean to enter ABC), you may use the BACKSPACE key to delete the error and then enter the proper letter.

If you enter a number when a letter is called for, or enter the name of an angle which is not on the screen, the program will not accept the entry and will wait for a proper entry.

If you enter the name of the wrong angle, segment, or triangle in a construction or measurement, you can correct your error by pressing ESC, which will return you to the previous menu. Select the submenu you were in and make the proper entry.

**Data Column:** The Data Column displays all your measurements, scrolls when it is full, and clears when you create a new triangle. You may also clear the Data Column at any time by entering CONTROL-D.

**Erase:** The **Erase** option allows you to clear segments or labels from the screen, but not from the memory. Therefore, you can still carry out constructions or measurements on the erased elements. If you have reached the limit on the number of constructions or labels on the screen, using **Erase** will not enable you to draw additional constructions or labels.

## Moving the Point in Adjustable Elements

To move the point about the screen, use the following keys:

|       | **APPLE IIe OR IIc** | **APPLE II+** |
|-------|----------------------|---------------|
| LEFT  | left arrow           | left arrow    |
| RIGHT | right arrow          | right arrow   |
| UP    | up arrow             | CTRL-K        |
| DOWN  | down arrow           | CTRL-J        |